

**TDMS No.** 99023 - 03  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/F 344

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**

beta-Myrcene  
**CAS Number:** 123-35-3

**Date Report Requested:** 08/15/2008  
**Time Report Requested:** 14:01:25  
**First Dose M/F:** 03/25/02 / 03/26/02  
**Lab:** BAT

F1\_Rev.2\_R2

**C Number:** C99023  
**Lock Date:** 12/22/2004  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.0.0

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FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Dosing Accident		1		1
Moribund Sacrifice	18	8	13	24
Natural Death	3	5	9	25
Survivors				
Terminal Sacrifice	29	36	28	
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 (2%)	
Perforation		1 (2%)		1 (2%)
Muscularis, Periesophageal Tissue, Hemorrhage				1 (2%)
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 (2%)	
Intestine Large, Colon	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 (2%)	
Parasite Metazoan	1 (2%)	1 (2%)	2 (4%)	
Intestine Large, Rectum	(50)	(50)	(50)	(48)
Inflammation, Chronic			1 (2%)	
Parasite Metazoan	6 (12%)	4 (8%)	3 (6%)	
Ulcer				1 (2%)
Intestine Small, Duodenum	(49)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Parasite Metazoan	1 (2%)			
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	2 (4%)	4 (8%)	3 (6%)	
Basophilic Focus	23 (46%)	12 (24%)	5 (10%)	2 (4%)
Clear Cell Focus	14 (28%)	19 (38%)	9 (18%)	
Degeneration, Cystic	1 (2%)	1 (2%)		
Eosinophilic Focus	6 (12%)	5 (10%)	3 (6%)	
Fatty Change	4 (8%)	4 (8%)	2 (4%)	
Hemorrhage				1 (2%)
Hepatodiaphragmatic Nodule	3 (6%)	3 (6%)	2 (4%)	3 (6%)
Inflammation, Chronic	34 (68%)	36 (72%)	19 (38%)	1 (2%)
Mixed Cell Focus	6 (12%)	1 (2%)		
Necrosis		4 (8%)	4 (8%)	4 (8%)

a - Number of animals examined microscopically at site and number of animals with lesion

FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Regeneration		1 (2%)		
Bile Duct, Hyperplasia	39 (78%)	42 (84%)	39 (78%)	6 (12%)
Centrilobular, Degeneration	3 (6%)	1 (2%)	1 (2%)	
Hepatocyte, Hypertrophy	1 (2%)			30 (60%)
Serosa, Hyperplasia		1 (2%)		
Serosa, Inflammation, Suppurative			1 (2%)	
Mesentery	(13)	(8)	(5)	(3)
Fat, Necrosis	12 (92%)	7 (88%)	4 (80%)	3 (100%)
Oral Mucosa	(2)	(0)	(0)	(0)
Inflammation, Chronic	1 (50%)			
Pancreas	(50)	(50)	(50)	(50)
Inflammation, Granulomatous	1 (2%)			
Necrosis	1 (2%)			
Acinus, Atrophy	9 (18%)	14 (28%)	11 (22%)	5 (10%)
Acinus, Hyperplasia	8 (16%)	7 (14%)	2 (4%)	
Artery, Inflammation, Chronic			1 (2%)	
Artery, Thrombosis				1 (2%)
Duct, Cyst	2 (4%)	3 (6%)	5 (10%)	
Salivary Glands	(50)	(50)	(50)	(48)
Atrophy				1 (2%)
Cyst		1 (2%)		
Stomach, Forestomach	(50)	(50)	(50)	(50)
Erosion	1 (2%)			3 (6%)
Fibrosis			1 (2%)	
Inflammation, Chronic Active	5 (10%)	3 (6%)	12 (24%)	27 (54%)
Ulcer	2 (4%)	2 (4%)	5 (10%)	18 (36%)
Serosa, Hyperplasia				1 (2%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Inflammation, Chronic	3 (6%)	7 (14%)	2 (4%)	
Mineralization	1 (2%)		1 (2%)	
Ulcer	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Epithelium, Ectasia	14 (28%)	27 (54%)	33 (66%)	14 (28%)
Epithelium, Hyperplasia	1 (2%)	2 (4%)	1 (2%)	
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	39 (78%)	43 (86%)	42 (84%)	38 (76%)
Atrium, Thrombosis	2 (4%)		2 (4%)	
Endocardium, Hyperplasia				1 (2%)
Epicardium, Hyperplasia				1 (2%)
Myocardium, Mineralization			1 (2%)	1 (2%)
Valve, Thrombosis			2 (4%)	

FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	5 (10%)	9 (18%)	1 (2%)
Necrosis		2 (4%)		1 (2%)
Vacuolization Cytoplasmic	13 (26%)	16 (32%)	15 (30%)	7 (14%)
Capsule, Hyperplasia		1 (2%)		
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	9 (18%)	9 (18%)	13 (26%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 (2%)			
Parathyroid Gland	(45)	(47)	(48)	(45)
Hyperplasia			1 (2%)	2 (4%)
Pituitary Gland	(50)	(49)	(50)	(50)
Angiectasis	8 (16%)	8 (16%)	9 (18%)	1 (2%)
Cyst	6 (12%)	9 (18%)	5 (10%)	2 (4%)
Pars Distalis, Hyperplasia	15 (30%)	11 (22%)	10 (20%)	4 (8%)
Thyroid Gland	(50)	(50)	(50)	(49)
Cyst	1 (2%)		1 (2%)	
Inflammation, Granulomatous				1 (2%)
C-cell, Hyperplasia	20 (40%)	18 (36%)	15 (30%)	1 (2%)
Follicle, Hyperplasia	4 (8%)	2 (4%)	3 (6%)	
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
Epididymis	(50)	(50)	(50)	(48)
Granuloma Sperm			1 (2%)	
Inflammation, Chronic			1 (2%)	
Vacuolization Cytoplasmic, Focal	1 (2%)			
Preputial Gland	(50)	(50)	(50)	(47)
Atrophy	1 (2%)			
Cyst	1 (2%)			
Hyperplasia	1 (2%)	2 (4%)		
Inflammation, Chronic	42 (84%)	44 (88%)	43 (86%)	36 (77%)
Prostate	(50)	(50)	(50)	(50)
Atrophy				1 (2%)
Hyperplasia	7 (14%)	3 (6%)	6 (12%)	1 (2%)
Inflammation, Chronic	4 (8%)	6 (12%)	8 (16%)	6 (12%)
Inflammation, Chronic Active	1 (2%)			

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FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Necrosis				1 (2%)
Seminal Vesicle	(50)	(50)	(50)	(50)
Atrophy				1 (2%)
Testes	(50)	(50)	(50)	(48)
Interstitial Cell, Hyperplasia	6 (12%)	2 (4%)	2 (4%)	9 (19%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia	8 (16%)	5 (10%)	7 (14%)	1 (2%)
Lymph Node	(3)	(5)	(6)	(0)
Mediastinal, Ectasia	1 (33%)			
Mediastinal, Hemorrhage		1 (20%)	1 (17%)	
Mediastinal, Hyperplasia, Lymphoid		2 (40%)		
Mediastinal, Pigmentation, Hemosiderin		1 (20%)	1 (17%)	
Lymph Node, Mandibular	(0)	(0)	(1)	(0)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Pigmentation, Hemosiderin				1 (2%)
Spleen	(50)	(50)	(50)	(50)
Atrophy	1 (2%)	2 (4%)	6 (12%)	46 (92%)
Congestion			2 (4%)	
Fibrosis	3 (6%)			
Hematopoietic Cell Proliferation	8 (16%)	6 (12%)	4 (8%)	
Infarct			1 (2%)	
Necrosis, Focal		1 (2%)	1 (2%)	
Thymus	(47)	(50)	(48)	(47)
Atrophy	40 (85%)	42 (84%)	43 (90%)	44 (94%)
Inflammation, Suppurative		1 (2%)		
Epithelial Cell, Hyperplasia			1 (2%)	
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(49)	(50)
Cyst			1 (2%)	
Inflammation, Chronic			1 (2%)	
Skin	(50)	(50)	(50)	(50)
Hyperkeratosis		1 (2%)	1 (2%)	
Inflammation, Chronic			1 (2%)	
Ulcer			1 (2%)	
Subcutaneous Tissue, Inflammation, Granulomatous		1 (2%)		
MUSCULOSKELETAL SYSTEM				

a - Number of animals examined microscopically at site and number of animals with lesion

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FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Bone	(50)	(50)	(50)	(50)
Skeletal Muscle	(1)	(1)	(1)	(0)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Hydrocephalus	3 (6%)			
Cerebrum, Compression		1 (2%)		
Hypothalamus, Compression	1 (2%)			
Neuron, Necrosis, Focal			1 (2%)	
Peripheral Nerve	(2)	(0)	(0)	(0)
Axon, Degeneration	1 (50%)			
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Inflammation	32 (64%)	33 (66%)	18 (36%)	14 (28%)
Inflammation, Chronic	1 (2%)			
Metaplasia, Osseous	5 (10%)		1 (2%)	2 (4%)
Alveolar Epithelium, Hyperplasia	9 (18%)	9 (18%)	2 (4%)	4 (8%)
Alveolus, Emphysema	1 (2%)			
Nose	(50)	(50)	(50)	(50)
Dysplasia			1 (2%)	
Inflammation, Chronic Active	14 (28%)	19 (38%)	27 (54%)	35 (70%)
Ulcer			1 (2%)	
Olfactory Epithelium, Degeneration	45 (90%)	49 (98%)	47 (94%)	49 (98%)
Trachea	(50)	(50)	(50)	(50)
Peritracheal Tissue, Inflammation, Chronic		1 (2%)		
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Cataract	1 (2%)			
Anterior Chamber, Inflammation, Suppurative		1 (2%)		
Cornea, Inflammation, Suppurative		1 (2%)		
Retina, Degeneration		1 (2%)		
Sclera, Metaplasia, Osseous	23 (46%)	25 (50%)	30 (60%)	6 (12%)
Harderian Gland	(50)	(50)	(50)	(49)
Atrophy		1 (2%)		1 (2%)
Cyst	1 (2%)			
Hyperplasia	1 (2%)	2 (4%)		1 (2%)
Inflammation, Chronic	2 (4%)	1 (2%)		2 (4%)
Pigmentation, Porphyrin	50 (100%)	50 (100%)	50 (100%)	49 (100%)

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FISCHER 344 RATS MALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Zymbal's Gland	(0)	(1)	(0)	(0)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Hydronephrosis	1 (2%)			
Inflammation, Suppurative, Focal	1 (2%)	22 (44%)	22 (44%)	
Inflammation, Chronic	1 (2%)			
Metaplasia, Osseous			1 (2%)	
Mineralization		1 (2%)		
Necrosis	1 (2%)	2 (4%)	2 (4%)	
Nephropathy	45 (90%)	48 (96%)	48 (96%)	49 (98%)
Pigmentation	1 (2%)			
Papilla, Mineralization	1 (2%)	48 (96%)	40 (80%)	4 (8%)
Renal Tubule, Cyst	1 (2%)	3 (6%)	2 (4%)	
Renal Tubule, Hyperplasia			2 (4%)	
Renal Tubule, Hyperplasia, Oncocytic		3 (6%)		
Renal Tubule, Nephrosis		42 (84%)	46 (92%)	48 (96%)
Transitional Epithelium, Hyperplasia		21 (42%)	19 (38%)	18 (36%)
Vein, Thrombosis			3 (6%)	3 (6%)
Urinary Bladder	(50)	(50)	(50)	(49)
Inflammation				1 (2%)

\*\*\* END OF MALE \*\*\*

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FISCHER 344 RATS FEMALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Accidently Killed		1		
Dosing Accident		1		1
Moribund Sacrifice	11	9	12	7
Natural Death	8	6	10	9
Survivors				
Terminal Sacrifice	31	33	28	33
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Esophagus	(50)	(50)	(49)	(50)
Perforation		1 (2%)		
Muscularis, Inflammation, Chronic				1 (2%)
Intestine Large, Colon	(50)	(50)	(50)	(50)
Parasite Metazoan		1 (2%)	1 (2%)	
Ulcer				1 (2%)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Parasite Metazoan	1 (2%)	5 (10%)	5 (10%)	2 (4%)
Ulcer	1 (2%)			
Intestine Small, Duodenum	(50)	(50)	(49)	(50)
Intestine Small, Ileum	(50)	(50)	(49)	(50)
Epithelium, Hyperplasia, Focal				1 (2%)
Liver	(50)	(50)	(49)	(50)
Angiectasis	1 (2%)			1 (2%)
Basophilic Focus	44 (88%)	43 (86%)	42 (86%)	31 (62%)
Clear Cell Focus	4 (8%)	6 (12%)	6 (12%)	8 (16%)
Eosinophilic Focus	6 (12%)	10 (20%)	15 (31%)	24 (48%)
Fatty Change	3 (6%)	3 (6%)	4 (8%)	1 (2%)
Fibrosis			2 (4%)	
Hemorrhage		1 (2%)		
Hepatodiaphragmatic Nodule	6 (12%)	5 (10%)	6 (12%)	8 (16%)
Inflammation, Chronic	41 (82%)	41 (82%)	41 (84%)	33 (66%)
Mineralization			1 (2%)	
Mixed Cell Focus	6 (12%)	5 (10%)	3 (6%)	6 (12%)
Necrosis	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Regeneration	1 (2%)			
Bile Duct, Cyst				1 (2%)
Bile Duct, Hyperplasia	8 (16%)	11 (22%)	12 (24%)	11 (22%)
Centrilobular, Degeneration	1 (2%)		2 (4%)	1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion



FISCHER 344 RATS FEMALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Centrilobular, Necrosis			2 (4%)	
Sinusoid, Congestion	1 (2%)			
Sinusoid, Infiltration Cellular, Histiocyte	1 (2%)			
Mesentery	(7)	(13)	(7)	(9)
Fat, Necrosis	6 (86%)	13 (100%)	7 (100%)	9 (100%)
Oral Mucosa	(1)	(0)	(0)	(0)
Pancreas	(50)	(50)	(49)	(50)
Acinus, Atrophy	9 (18%)	9 (18%)	10 (20%)	3 (6%)
Acinus, Hyperplasia	1 (2%)		1 (2%)	
Duct, Cyst	3 (6%)	2 (4%)	3 (6%)	4 (8%)
Salivary Glands	(50)	(49)	(49)	(50)
Hyperplasia				1 (2%)
Stomach, Forestomach	(50)	(50)	(49)	(50)
Inflammation, Chronic Active	1 (2%)	1 (2%)	2 (4%)	3 (6%)
Ulcer			1 (2%)	1 (2%)
Stomach, Glandular	(50)	(50)	(49)	(50)
Mineralization	1 (2%)	4 (8%)		1 (2%)
Epithelium, Ectasia	38 (76%)	39 (78%)	36 (73%)	38 (76%)
Epithelium, Hyperplasia				1 (2%)
Tongue	(1)	(0)	(1)	(0)
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(49)	(50)
Cardiomyopathy	43 (86%)	31 (62%)	30 (61%)	34 (68%)
Fibrosis		1 (2%)		
Atrium, Thrombosis			1 (2%)	
Myocardium, Inflammation, Chronic		1 (2%)		
Valve, Inflammation, Chronic		1 (2%)		
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Hyperplasia	10 (20%)	10 (20%)	12 (24%)	8 (16%)
Necrosis			1 (2%)	
Vacuolization Cytoplasmic	17 (34%)	14 (28%)	14 (28%)	16 (32%)
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	1 (2%)	4 (8%)	1 (2%)
Islets, Pancreatic	(50)	(50)	(49)	(50)
Hyperplasia		2 (4%)	4 (8%)	
Parathyroid Gland	(47)	(48)	(47)	(45)
Cyst				1 (2%)
Pituitary Gland	(50)	(50)	(50)	(50)
Angiectasis	17 (34%)	24 (48%)	16 (32%)	14 (28%)

FISCHER 344 RATS FEMALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Cyst	14 (28%)	22 (44%)	16 (32%)	9 (18%)
Fibrosis	1 (2%)	2 (4%)		
Pars Distalis, Hyperplasia	14 (28%)	13 (26%)	15 (30%)	10 (20%)
Pars Intermedia, Hyperplasia	1 (2%)			
Thyroid Gland	(50)	(49)	(49)	(50)
Cyst			1 (2%)	
C-cell, Hyperplasia	19 (38%)	20 (41%)	22 (45%)	17 (34%)
Follicle, Hyperplasia	1 (2%)	1 (2%)	4 (8%)	4 (8%)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	3 (6%)	1 (2%)	1 (2%)	
Hyperplasia	8 (16%)	8 (16%)	13 (26%)	4 (8%)
Inflammation, Chronic	22 (44%)	11 (22%)	26 (52%)	14 (28%)
Ovary	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Cyst	3 (6%)	7 (14%)	6 (12%)	4 (8%)
Uterus	(50)	(50)	(50)	(50)
Angiectasis				1 (2%)
Cyst		2 (4%)	2 (4%)	
Dilatation	2 (4%)	1 (2%)	2 (4%)	1 (2%)
Inflammation, Suppurative		1 (2%)		1 (2%)
Inflammation, Chronic	1 (2%)			1 (2%)
Necrosis			1 (2%)	
Endometrium, Hyperplasia, Cystic	4 (8%)	7 (14%)	7 (14%)	13 (26%)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	1 (2%)	2 (4%)	1 (2%)
Lymph Node	(5)	(3)	(2)	(6)
Deep Cervical, Hyperplasia, Lymphoid	1 (20%)	1 (33%)		
Deep Cervical, Infiltration Cellular, Histiocyte				1 (17%)
Deep Cervical, Pigmentation				1 (17%)
Mediastinal, Ectasia		1 (33%)		
Mediastinal, Hyperplasia, Lymphoid	1 (20%)	2 (67%)		1 (17%)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Infiltration Cellular, Histiocyte				1 (2%)

FISCHER 344 RATS FEMALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Pigmentation, Hemosiderin				1 (2%)
Spleen	(50)	(50)	(50)	(50)
Atrophy	6 (12%)	2 (4%)	3 (6%)	2 (4%)
Fibrosis			1 (2%)	
Hematopoietic Cell Proliferation	7 (14%)	12 (24%)	13 (26%)	9 (18%)
Infarct			1 (2%)	
Thymus	(49)	(48)	(49)	(50)
Atrophy	46 (94%)	45 (94%)	47 (96%)	44 (88%)
Cyst			1 (2%)	
Infiltration Cellular, Lymphocyte	1 (2%)	1 (2%)		1 (2%)
Inflammation, Chronic				
Epithelial Cell, Hyperplasia	1 (2%)		1 (2%)	
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Cyst	2 (4%)	1 (2%)	2 (4%)	2 (4%)
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		1 (2%)		
MUSCULOSKELETAL SYSTEM				
Skeletal Muscle	(0)	(0)	(1)	(0)
Inflammation, Suppurative			1 (100%)	
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Hydrocephalus	3 (6%)	4 (8%)	6 (12%)	2 (4%)
Hypothalamus, Compression	4 (8%)	4 (8%)	8 (16%)	5 (10%)
Meninges, Inflammation, Chronic			1 (2%)	2 (4%)
Spinal Cord	(1)	(0)	(0)	(0)
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(49)	(50)
Congestion	1 (2%)			
Edema		1 (2%)		
Inflammation	34 (68%)	43 (86%)	40 (82%)	32 (64%)
Metaplasia, Osseous	1 (2%)			2 (4%)
Alveolar Epithelium, Hyperplasia	6 (12%)	3 (6%)	4 (8%)	7 (14%)
Nose	(50)	(50)	(50)	(50)

FISCHER 344 RATS FEMALE	0 G/KG	0.25 G/KG	0.5 G/KG	1.0 G/KG
Erosion	1 (2%)			
Inflammation, Chronic Active	16 (32%)	10 (20%)	13 (26%)	10 (20%)
Olfactory Epithelium, Degeneration	45 (90%)	44 (88%)	45 (90%)	48 (96%)
SPECIAL SENSES SYSTEM				
Ear	(0)	(3)	(0)	(0)
Hyperplasia		1 (33%)		
Eye	(50)	(50)	(49)	(50)
Cataract	1 (2%)		1 (2%)	1 (2%)
Degeneration				1 (2%)
Optic Nerve, Atrophy	1 (2%)			1 (2%)
Retina, Atrophy				1 (2%)
Sclera, Metaplasia, Osseous	1 (2%)			1 (2%)
Harderian Gland	(50)	(50)	(49)	(50)
Atrophy	1 (2%)	1 (2%)	2 (4%)	
Hyperplasia	1 (2%)		1 (2%)	1 (2%)
Inflammation, Chronic	7 (14%)	8 (16%)	7 (14%)	2 (4%)
Pigmentation, Porphyrin	50 (100%)	48 (96%)	48 (98%)	45 (90%)
Zymbal's Gland	(0)	(0)	(0)	(2)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Inflammation, Suppurative, Focal		1 (2%)		1 (2%)
Mineralization	1 (2%)			
Necrosis	1 (2%)	1 (2%)	1 (2%)	
Nephropathy	26 (52%)	43 (86%)	41 (82%)	44 (88%)
Pigmentation	1 (2%)			
Papilla, Inflammation, Suppurative	1 (2%)			
Papilla, Mineralization	5 (10%)	3 (6%)	1 (2%)	
Pelvis, Inflammation, Chronic	1 (2%)	3 (6%)		
Renal Tubule, Cyst	2 (4%)		1 (2%)	
Renal Tubule, Hyperplasia				1 (2%)
Renal Tubule, Nephrosis		2 (4%)	27 (54%)	45 (90%)
Transitional Epithelium, Hyperplasia	1 (2%)	12 (24%)	15 (30%)	19 (38%)
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation	2 (4%)		1 (2%)	

\*\*\* END OF REPORT \*\*\*